CURRENT AND FUTURE SOUND TRANSIT SERVICE

TACOMA LINK EXPANSION

MAP KEY

Link Light Rail

- Central Link (SeaTac/Airport–Westlake/Seattle)
- Tacoma Link (Tacoma Dome–Theater District)
- Under Construction
- In Design
- In Planning/Planned

Sounder Commuter Rail

- Everett–Seattle Sounder
- Lakewood–Tacoma–Seattle Sounder

ST Express Regional Bus

- Express Bus Service
- Future Bus Rapid Transit (BRT)

Supporting Investments

- Park & Ride – Rail Station or Bus Facility
- Rail Station, Transit Center or Bus Stop Improvements
- First Hill Streetcar (Opens 2014)
- HOV/Transit Improvements
- HOV Direct Access Ramp, Freeway Station or Overpass

Ferry Terminal · Amtrak · Sea-Tac Airport

Future projects at a glance

- Expanded new light rail service to Lynnwood, Overlake and Kent/Des Moines
- New First Hill streetcar connecting Capitol Hill and Pioneer Square
- Four new round-trip Sounder trains between Lakewood and Seattle
- Sounder station improvements
- Permanent Sounder station in Tukwila
- Bus Rapid Transit service across SR 520

SOUNDTRANSIT
RIDE THE WAVE

TIMELINE/PROCESS

TACOMA LINK EXPANSION

WE ARE HERE

Alternatives Development

Identify funding partner(s) & apply for Federal Grant

Environmental Review & Preliminary Design

Final Design

Construction

Testing & Pre-Operations

Start of Service

City Council Study Session & Stakeholder Roundtable

Open House

City Council Study Session & Stakeholder Roundtable

Sound Transit Capital Committee

Sound Transit Board Action

November 2013 - January 2014

Public review of alignments and preliminary evaluation

- Presentations to community groups
- Website
- Online survey
- Open house

February

Sound Transit Board identifies the alignment(s) to advance into the state (SEPA) and federal (NEPA) environmental process.

SOUNDTRANSIT
RIDE THE WAVE

WHY EXPAND?

TACOMA LINK EXPANSION

Early Scoping *(Aug-Sep 2012)*

Some reasons this project is needed:

- More people want to connect to the regional transit system
- Increasing congestion
- Increasing greenhouse gas emissions
- More people will be living and working downtown

The purpose of this project is to:

- Improve mobility and transportation or transit access
- Be sustainable and environmentally sensitive
- Spur economic development
- Serve traditionally underserved neighborhoods

After Public Input *(Fall 2012)*
(in order of importance, with 1 most important)

Some reasons this project is needed:

1. More people want to connect to the regional transit system
2. More people will be living and working in downtown
3. Increasing congestion
4. Increasing greenhouse gas emissions

The purpose of this project is to:

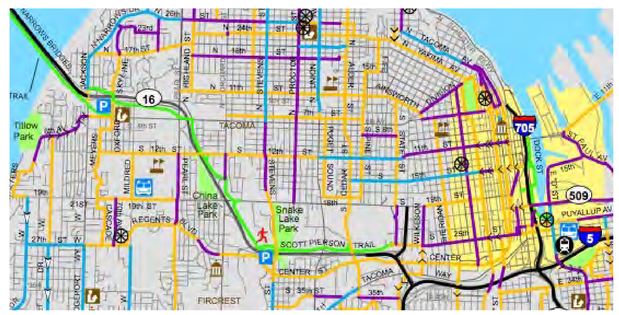
1. Improve mobility and transportation or transit access
2. Spur economic development
3. Serve traditionally underserved neighborhoods
4. Be sustainable and environmentally sensitive

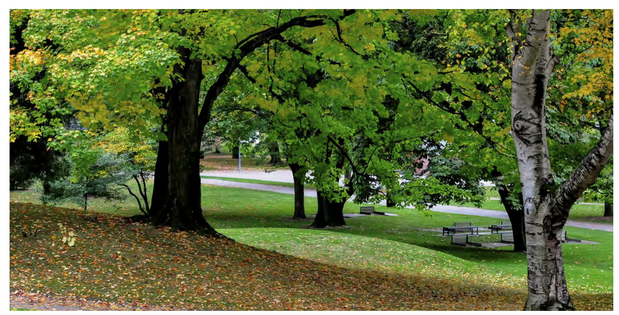
SOUNDTRANSIT
RIDE THE WAVE

PROJECT GOALS

TACOMA LINK EXPANSION

- Improve mobility and transportation access for Tacoma residents and visitors.
- Increase transit ridership within the City of Tacoma.
- Serve underserved neighborhoods and communities in the City of Tacoma.
- Use transit to spur economic development and other types of investment.
- Ensure the project is environmentally sensitive and sustainable.
- Establish a project that is competitive for federal funding.





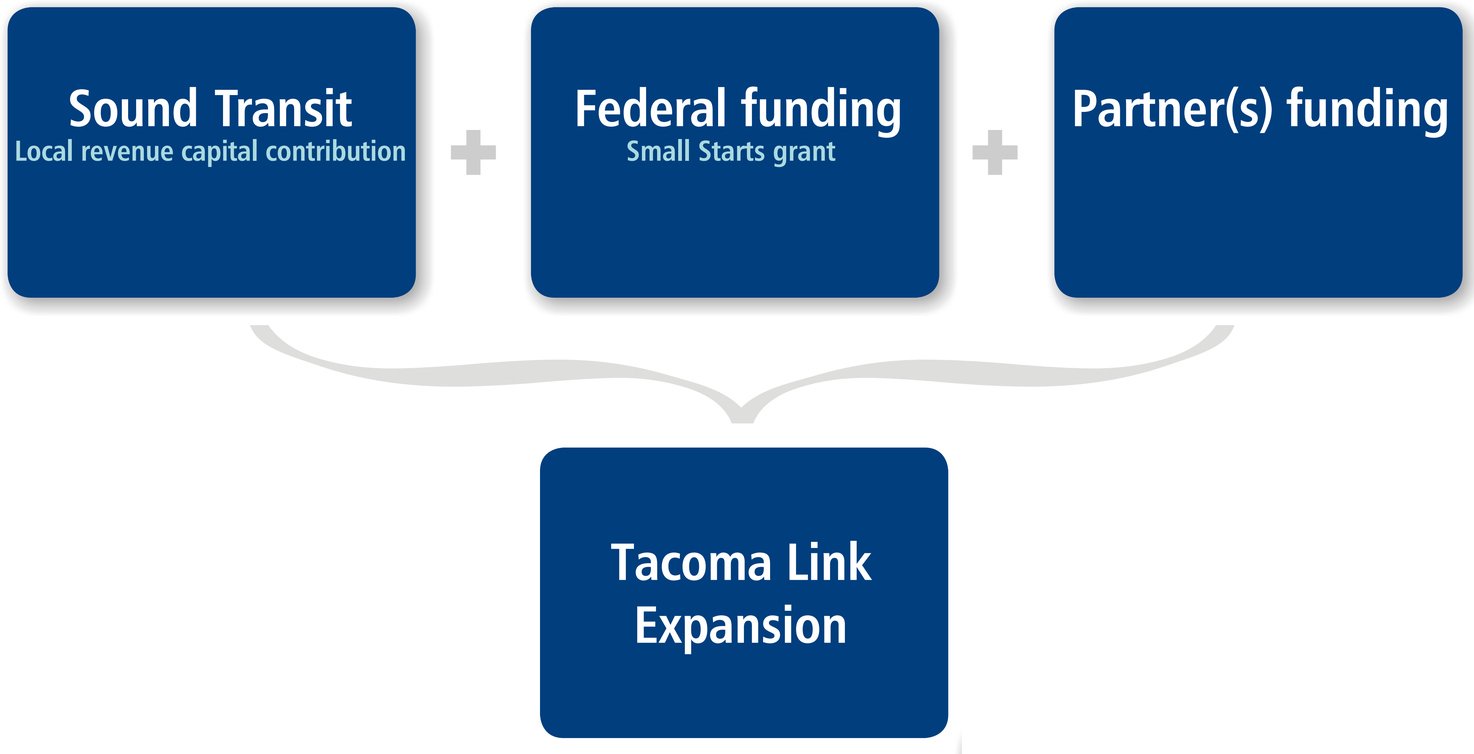
SOUNDTRANSIT
RIDE THE WAVE

FUNDING: A PARTNERSHIP APPROACH

TACOMA LINK EXPANSION

Sound Transit 2, approved by voters in 2008, includes funding for a partnership to expand Tacoma Link.

In addition to the **Sound Transit 2 capital contribution, potential** expansion of the current 1.6 mile system will require partnership funding, and federal funding.



SOUNDTRANSIT
RIDE THE WAVE

NORTH DOWNTOWN CENTRAL CORRIDOR (E1)

TACOMA LINK EXPANSION

This corridor was identified for the expansion during the Alternatives Analysis phase of the project in 2013.

Tacoma Link Expansion: North Downtown Central Corridor (E1)

Legend

- Existing Tacoma LINK
- Link Stations
- Other Community Institutions
- Hospitals
- Parks

Schools

- Primary School
- Secondary School, Post-secondary and Vocational school

Corridor

- E1
- North Downtown Central Corridor (E1)
- Neighborhood Boundary
- Mixed Use Centers
- Streets - Arterial
- Highways

0 0.5 Miles

Map shows 1/2-mile-wide corridor study area

Distance: 2.3 miles

Designated Mixed Use Centers and Regional Destinations:

Stadium Mixed Use Center; Martin Luther King Mixed Use Center; Downtown Regional Growth Center

SOUNDTRANSIT

Tacoma

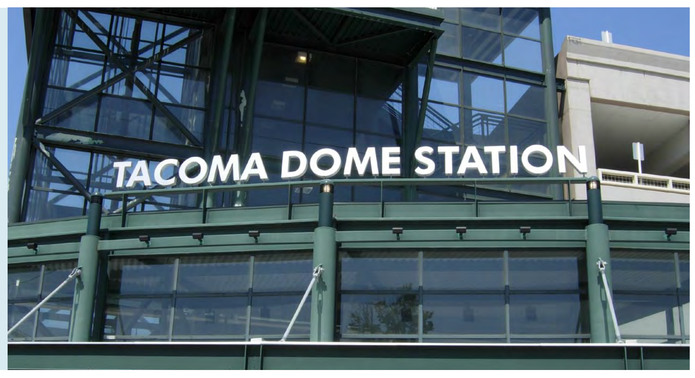
SOUNDTRANSIT
RIDE THE WAVE

SCREENING OF POTENTIAL ALIGNMENTS

TACOMA LINK EXPANSION

Five questions were applied to each alignment:

☑ Improve travel time to Tacoma Dome Station?



☑ Avoid major environmental and community impacts?

☑ Serve community destinations?

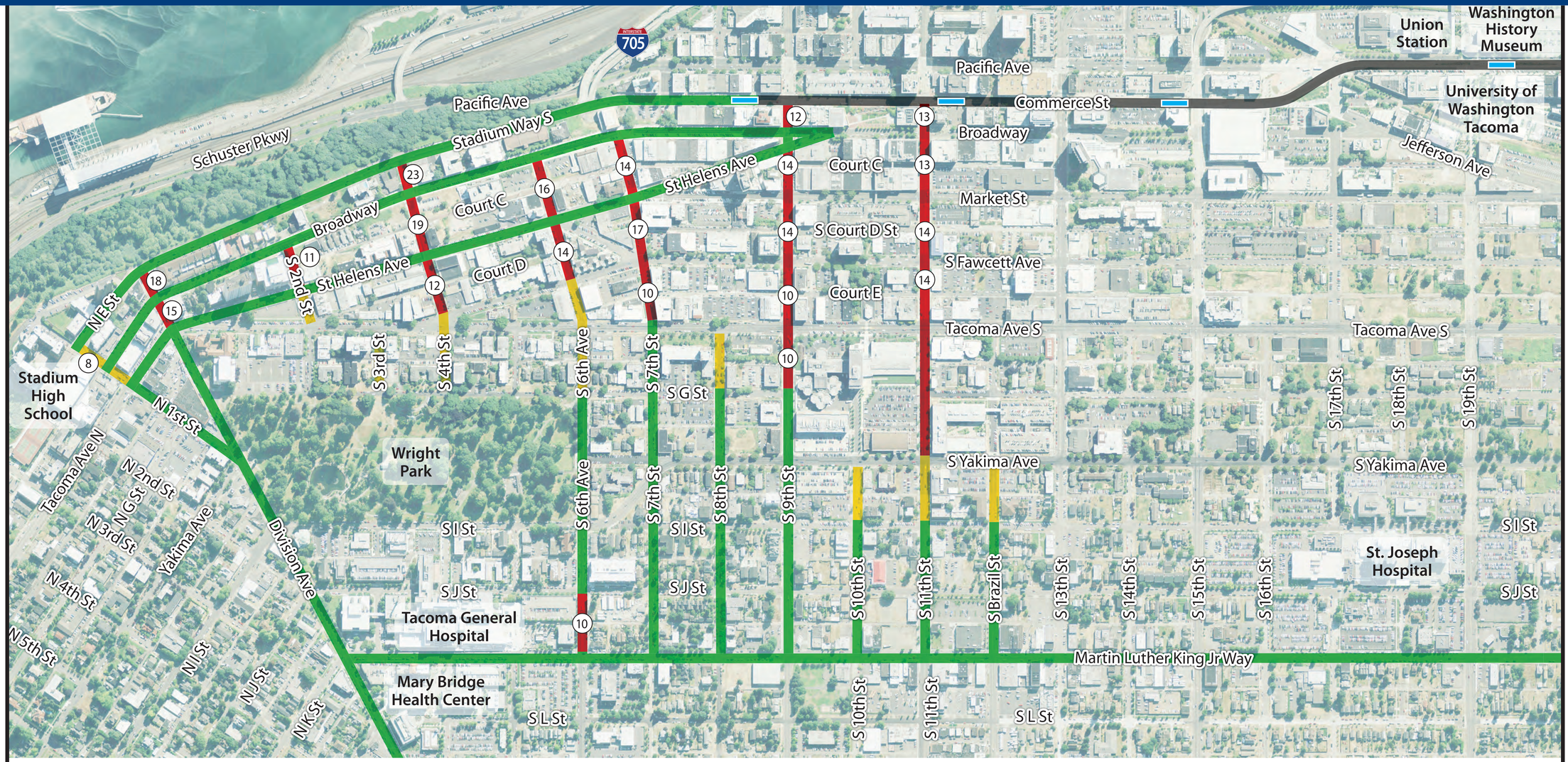
☑ Spur economic development and other types of investments?

☑ Ensure the project is affordable and cost-effective to construct?

SOUNDTRANSIT
RIDE THE WAVE

STREET GRADES

TACOMA LINK EXPANSION



Legend

- Less than 8% grade (no operational constraint)
- 8% - 9% grade (potential operational or construction constraint)
- Greater than 9% grade (operation impractical)
- Existing alignment
- Existing station
- (%) Maximum Grade Between Intersections*

Data Source: Pictometry Online

* Grades are at $^{+}/_{-}$ 1%

SOUNDTRANSIT
RIDE THE WAVE

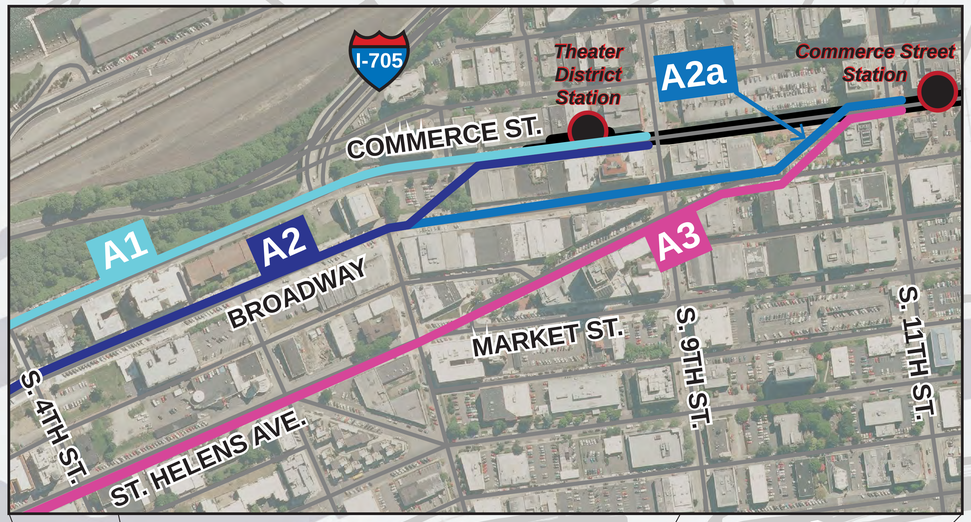
ROUTE ALIGNMENTS OVERVIEW

TACOMA LINK EXPANSION

Legend

- Existing Alignment
- Existing Stations
- Sound Transit Maintenance Facility
- Stadium Way (A1)
- Broadway (A2)
- Broadway with Theater Square (A2a)
- St. Helens (A3)
- St. Helens with Division Only (A3a)
- MLK (B1)
- MLK/J Couplet to 19th (B2)

The corridor was divided into two segments to further evaluate the corridor and identify route alignments.

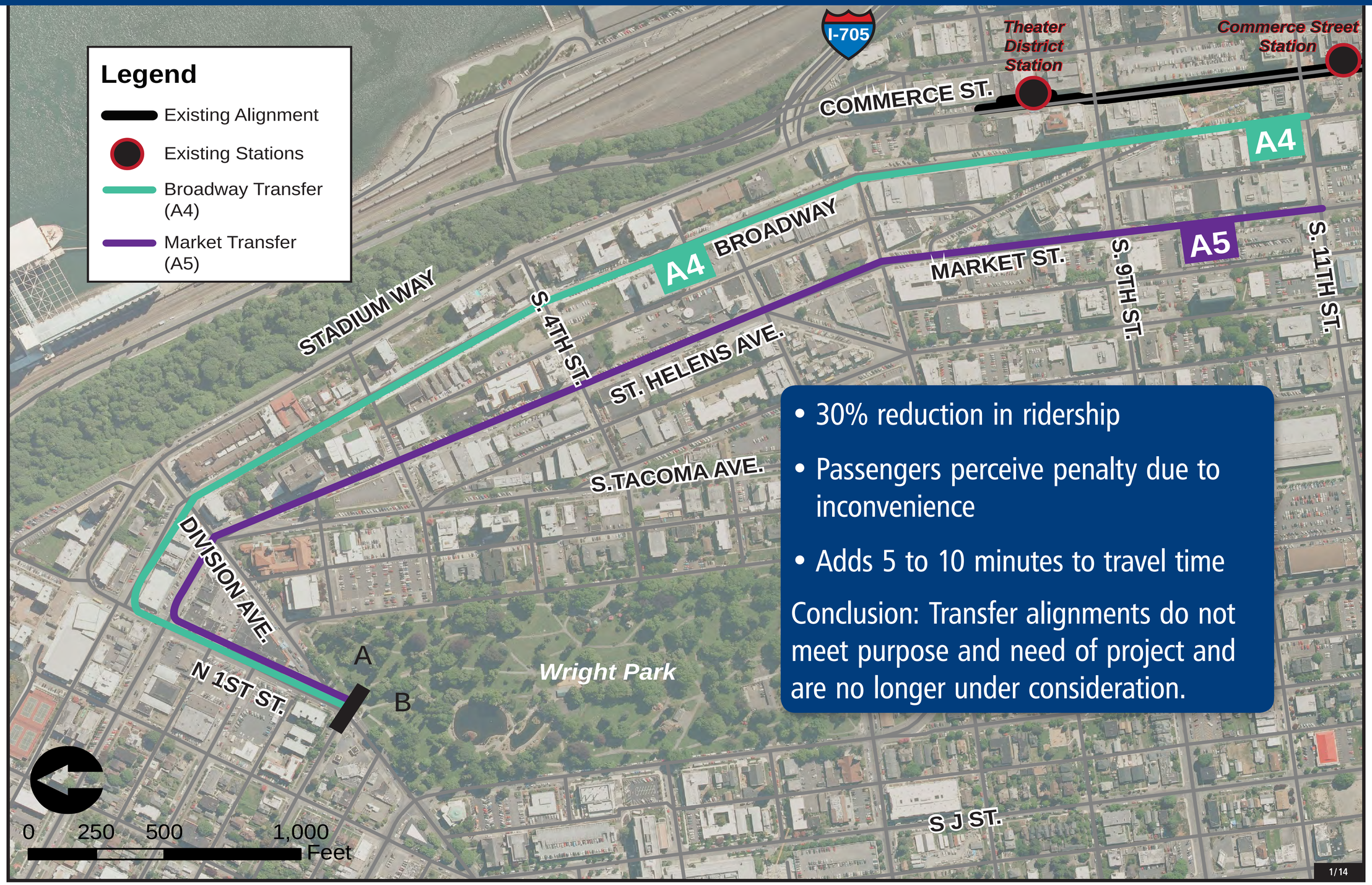


See inset above for detail

SOUNDTRANSIT
RIDE THE WAVE

TRANSFER ALIGNMENTS (A4 & A5)

TACOMA LINK EXPANSION



- 30% reduction in ridership
- Passengers perceive penalty due to inconvenience
- Adds 5 to 10 minutes to travel time

Conclusion: Transfer alignments do not meet purpose and need of project and are no longer under consideration.

SOUNDTRANSIT
RIDE THE WAVE

SCREENING OF POTENTIAL ALIGNMENTS LEGEND

TACOMA LINK EXPANSION

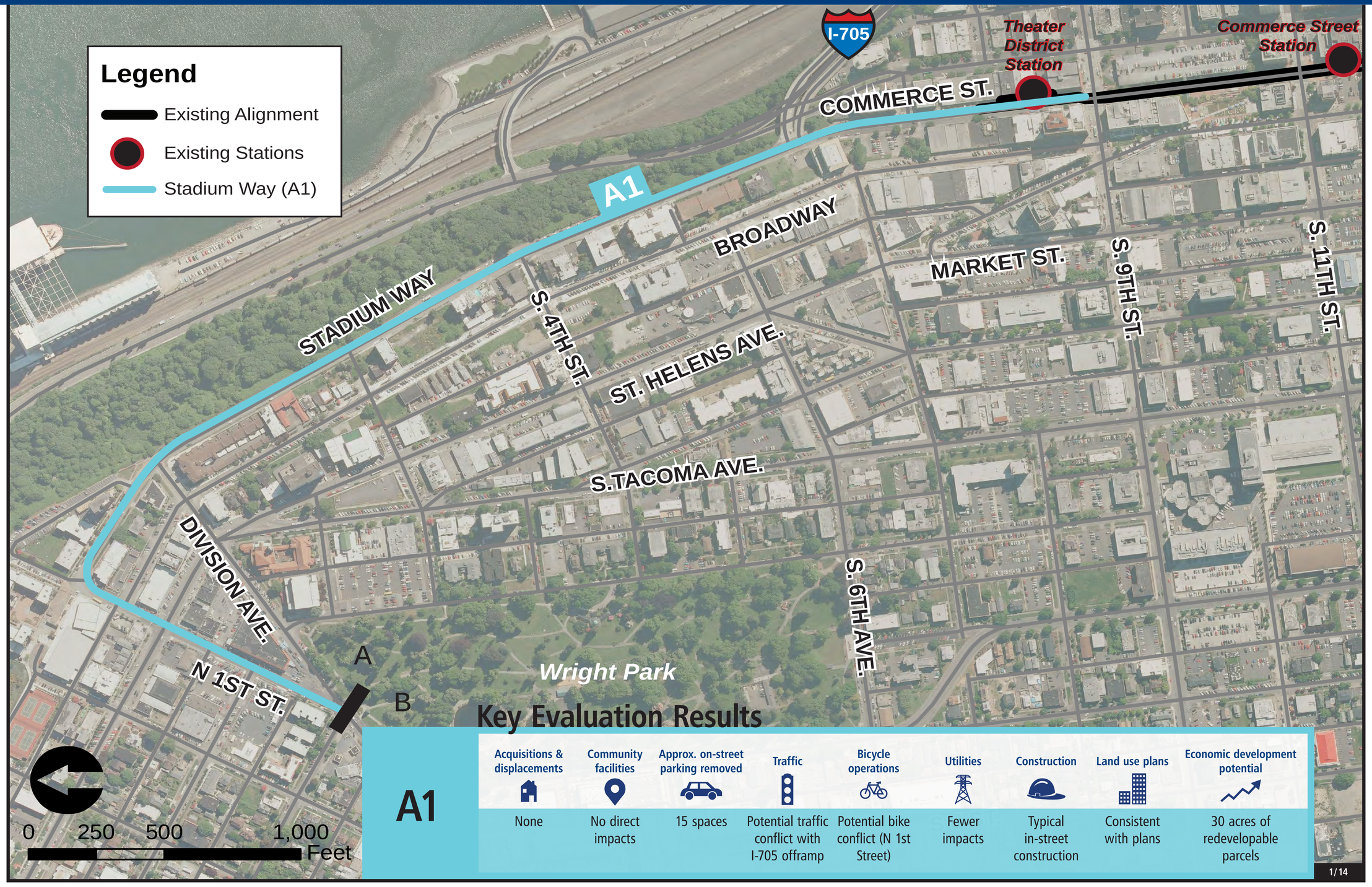
Sound Transit performed a preliminary evaluation of the alignments, using 20 different measures, 9 are shown below. A number of measures had results that were common to all alignments. The **differentiating criteria** are defined below and the results are shown for each alignment.

Acquisitions and displacements	Property acquisitions and displacements of current uses
Community facilities	Direct impacts to churches, community centers, theaters, schools and other facilities
On-street parking spaces removed	Approximate number of on-street parking spaces removed
Traffic	New traffic signals and potential impacts to freeway on-ramps
Bicycle operations	Potential conflicts with designated bicycle boulevards, cycle tracks or bike lanes
Utilities	Type of construction activities and temporary effects of construction
Construction	Type of construction activities and temporary effects of construction
Land use plans	Consistency with the City's land use planning documents including the Comprehensive Plan, MLK Jr. Way Design Plan, and the draft Hilltop Subarea Plan
Economic development potential	Potential acres of redevelopable parcels within 5-minute walk distance of feasible station locations

SOUNDTRANSIT
RIDE THE WAVE

STADIUM WAY (A1)

TACOMA LINK EXPANSION



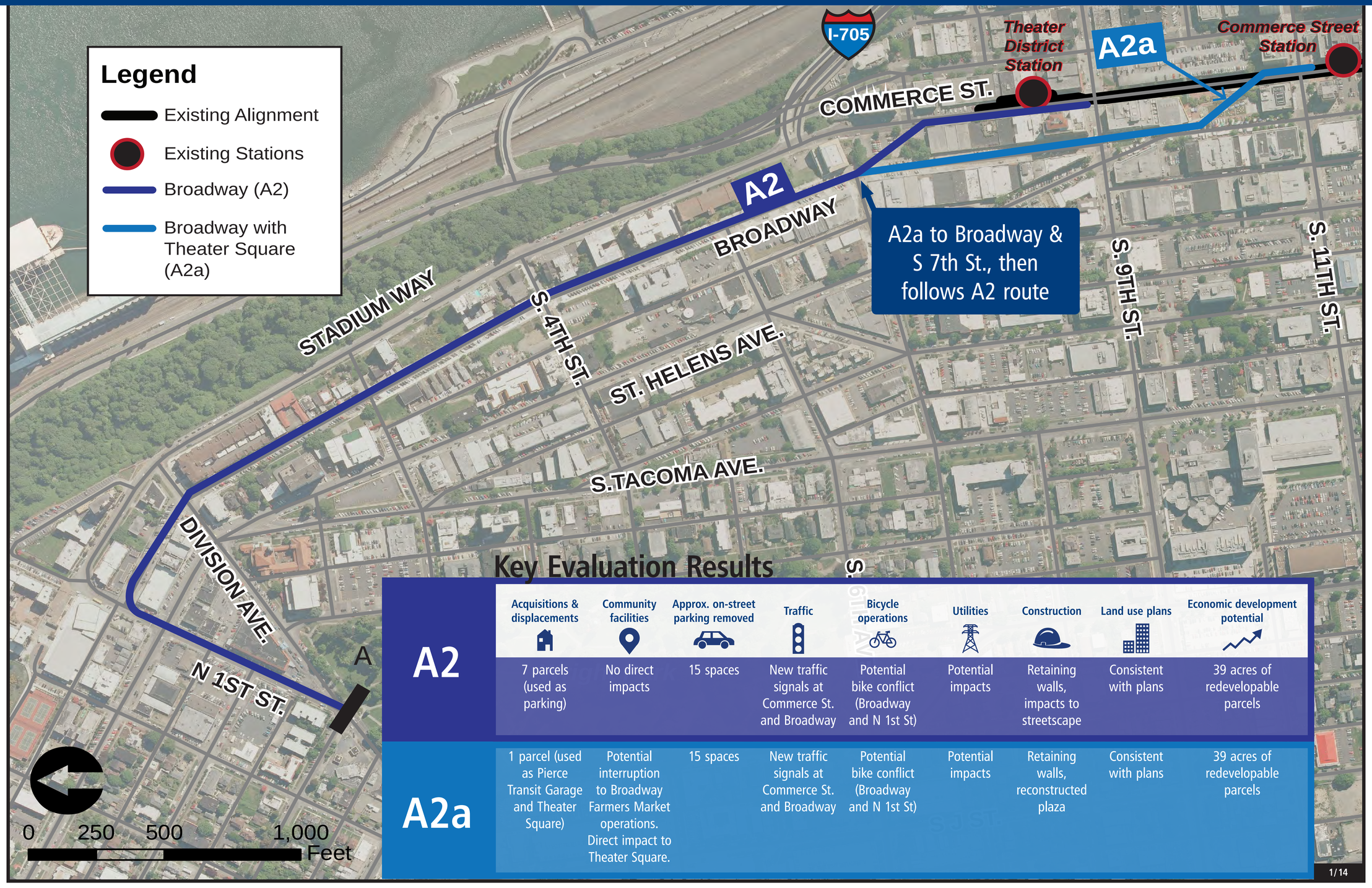
Key Evaluation Results

	Acquisitions & displacements	Community facilities	Approx. on-street parking removed	Traffic	Bicycle operations	Utilities	Construction	Land use plans	Economic development potential
A1	None	No direct impacts	15 spaces	Potential traffic conflict with I-705 offramp	Potential bike conflict (N 1st Street)	Fewer impacts	Typical in-street construction	Consistent with plans	30 acres of redevelopable parcels

SOUNDTRANSIT
RIDE THE WAVE

BROADWAY (A2) & BROADWAY WITH THEATER SQUARE OPTION (A2a)

TACOMA LINK EXPANSION



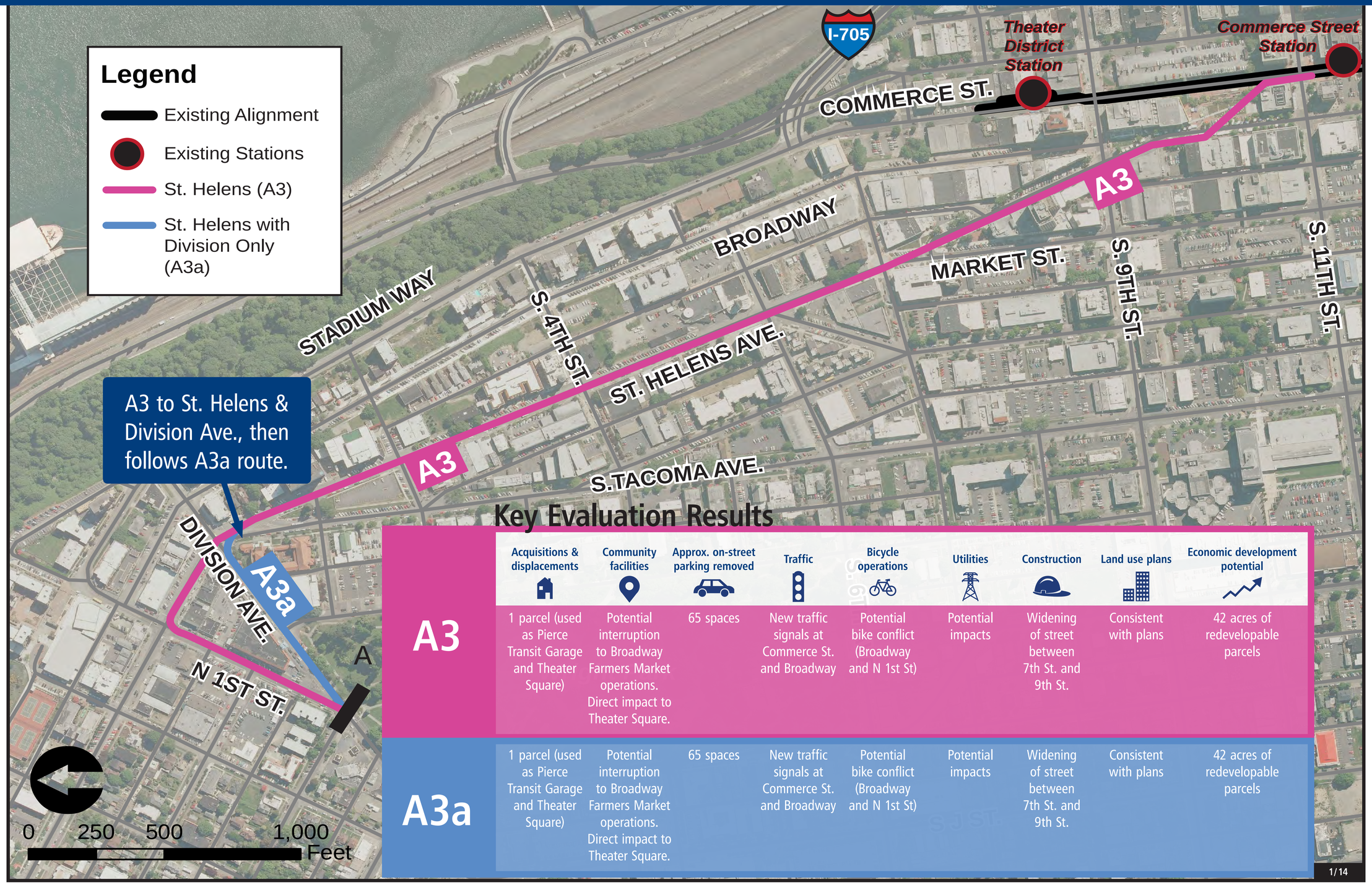
Key Evaluation Results

	Acquisitions & displacements	Community facilities	Approx. on-street parking removed	Traffic	Bicycle operations	Utilities	Construction	Land use plans	Economic development potential
A2	7 parcels (used as parking)	No direct impacts	15 spaces	New traffic signals at Commerce St. and Broadway	Potential bike conflict (Broadway and N 1st St)	Potential impacts	Retaining walls, impacts to streetscape	Consistent with plans	39 acres of redevelopable parcels
A2a	1 parcel (used as Pierce Transit Garage and Theater Square)	Potential interruption to Broadway Farmers Market operations. Direct impact to Theater Square.	15 spaces	New traffic signals at Commerce St. and Broadway	Potential bike conflict (Broadway and N 1st St)	Potential impacts	Retaining walls, reconstructed plaza	Consistent with plans	39 acres of redevelopable parcels

SOUNDTRANSIT
RIDE THE WAVE

ST. HELENS (A3) & ST. HELENS WITH DIVISION ONLY (A3a)

TACOMA LINK EXPANSION



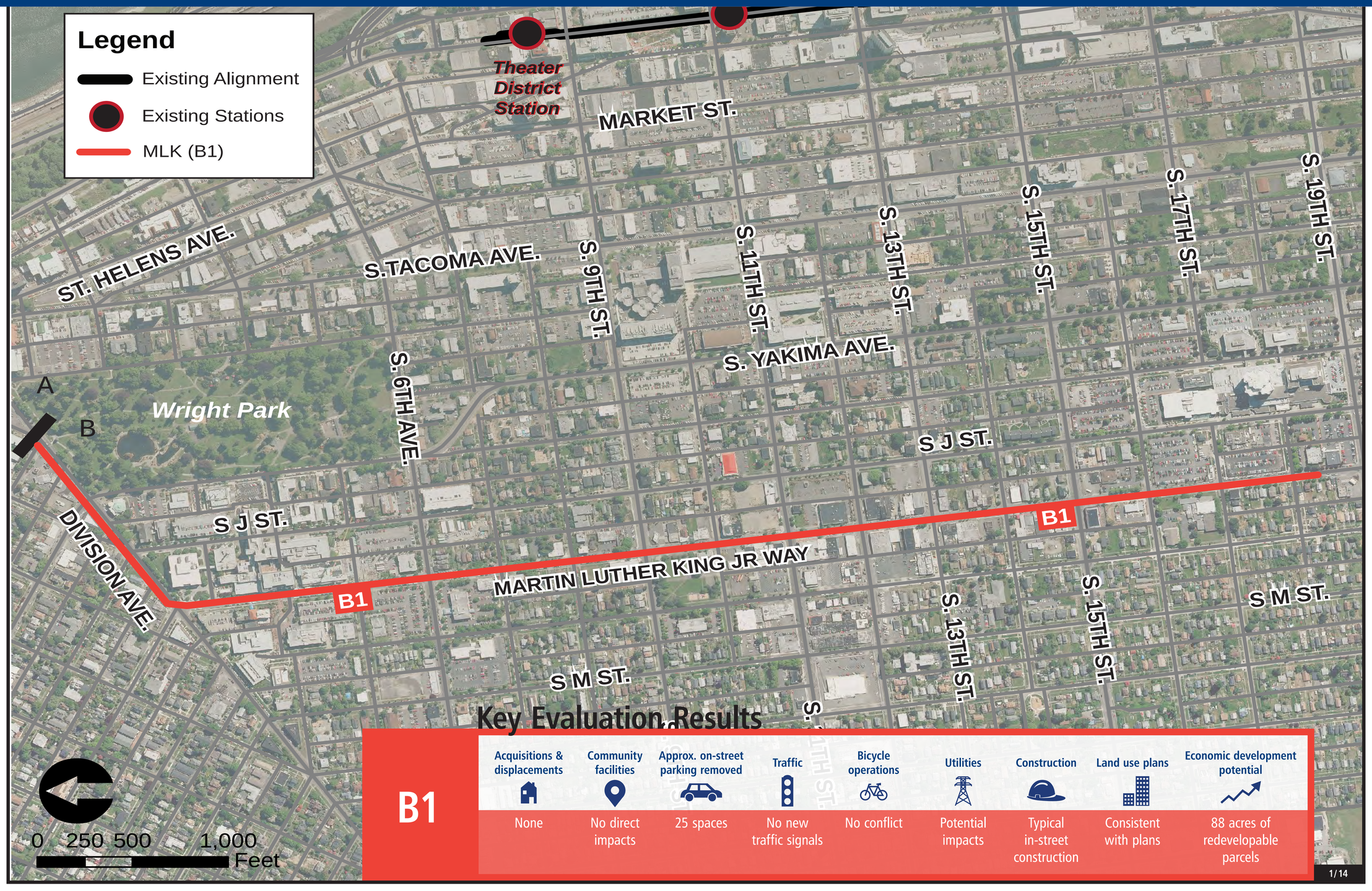
Key Evaluation Results

	Acquisitions & displacements	Community facilities	Approx. on-street parking removed	Traffic	Bicycle operations	Utilities	Construction	Land use plans	Economic development potential
A3	1 parcel (used as Pierce Transit Garage and Theater Square)	Potential interruption to Broadway Farmers Market operations. Direct impact to Theater Square.	65 spaces	New traffic signals at Commerce St. and Broadway	Potential bike conflict (Broadway and N 1st St)	Potential impacts	Widening of street between 7th St. and 9th St.	Consistent with plans	42 acres of redevelopable parcels
A3a	1 parcel (used as Pierce Transit Garage and Theater Square)	Potential interruption to Broadway Farmers Market operations. Direct impact to Theater Square.	65 spaces	New traffic signals at Commerce St. and Broadway	Potential bike conflict (Broadway and N 1st St)	Potential impacts	Widening of street between 7th St. and 9th St.	Consistent with plans	42 acres of redevelopable parcels

SOUNDTRANSIT
RIDE THE WAVE

MLK (B1)

TACOMA LINK EXPANSION



Key Evaluation Results

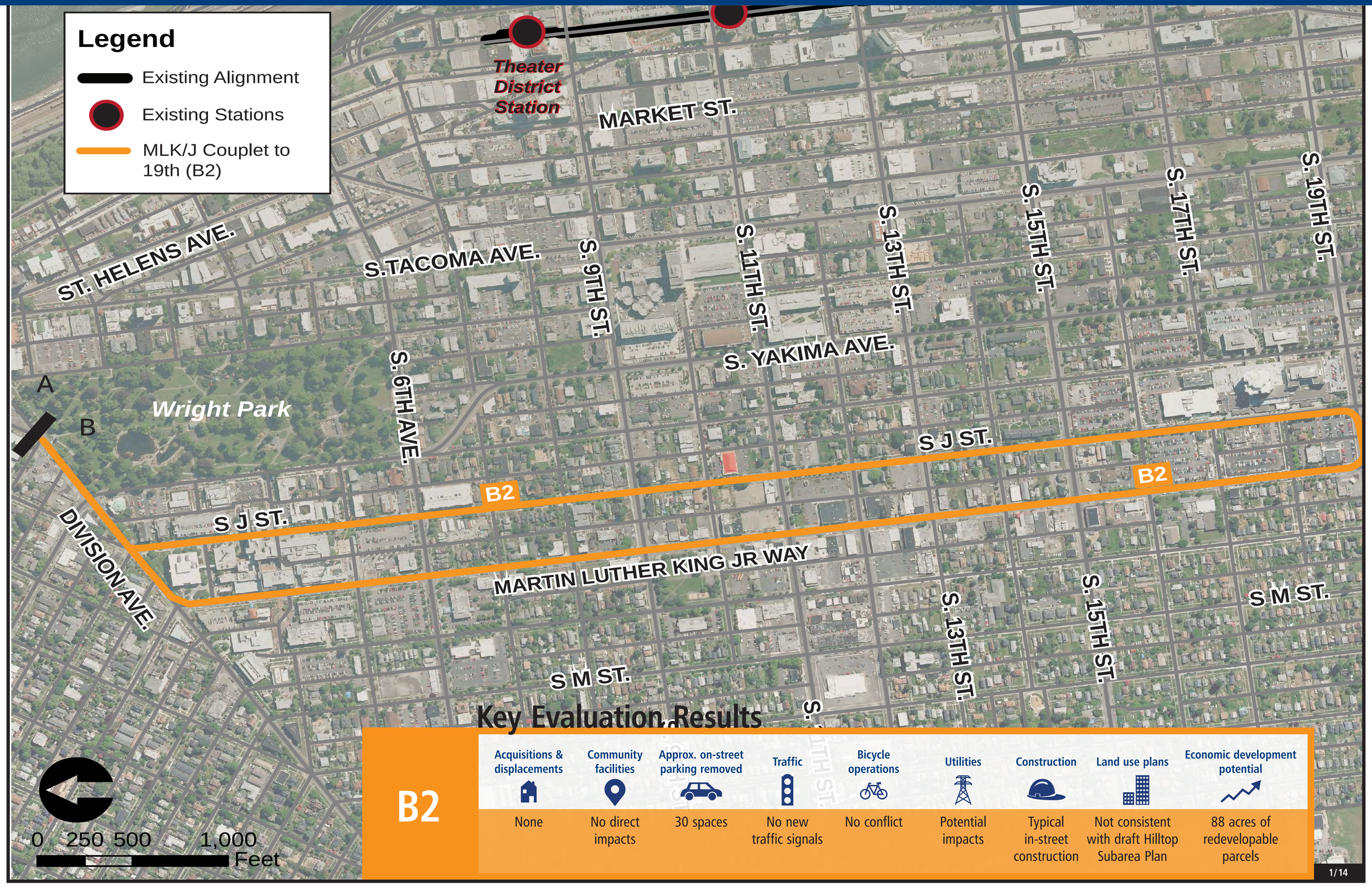
B1

Acquisitions & displacements	Community facilities	Approx. on-street parking removed	Traffic	Bicycle operations	Utilities	Construction	Land use plans	Economic development potential
None	No direct impacts	25 spaces	No new traffic signals	No conflict	Potential impacts	Typical in-street construction	Consistent with plans	88 acres of redevelopable parcels

SOUNDTRANSIT
RIDE THE WAVE

MLK/J COUPLET TO 19TH (B2)

TACOMA LINK EXPANSION



Key Evaluation Results

B2

Acquisitions & displacements	Community facilities	Approx. on-street parking removed	Traffic	Bicycle operations	Utilities	Construction	Land use plans	Economic development potential
None	No direct impacts	30 spaces	No new traffic signals	No conflict	Potential impacts	Typical in-street construction	Not consistent with draft Hilltop Subarea Plan	88 acres of redevelopable parcels

SOUNDTRANSIT
RIDE THE WAVE

MARKETS AND MAJOR DESTINATIONS SERVED

TACOMA LINK EXPANSION

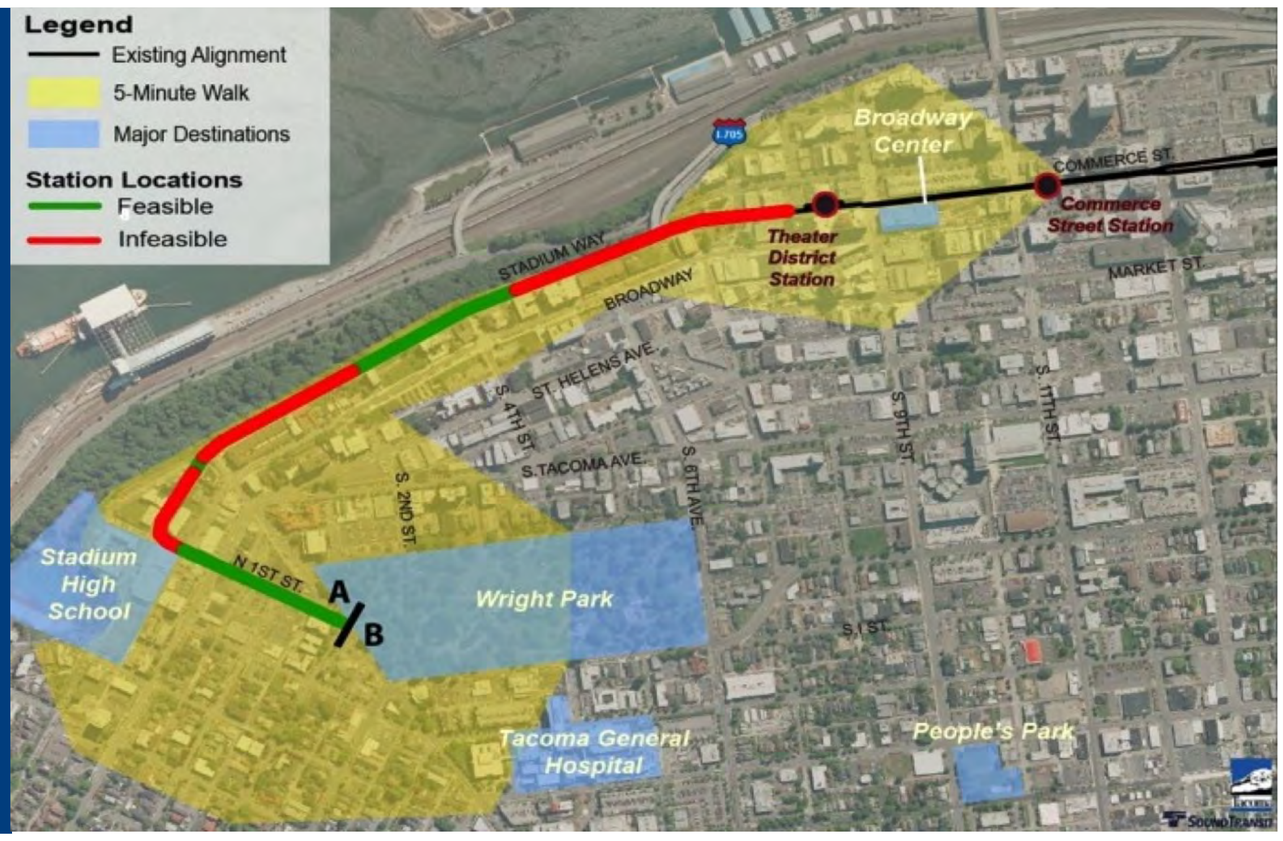
- Transit market is considered to be a five-minute walk distance from potential station locations
- Actual station locations to be determined in next phase
- Potential station locations shown where grades are two percent or less

SOUNDTRANSIT
RIDE THE WAVE

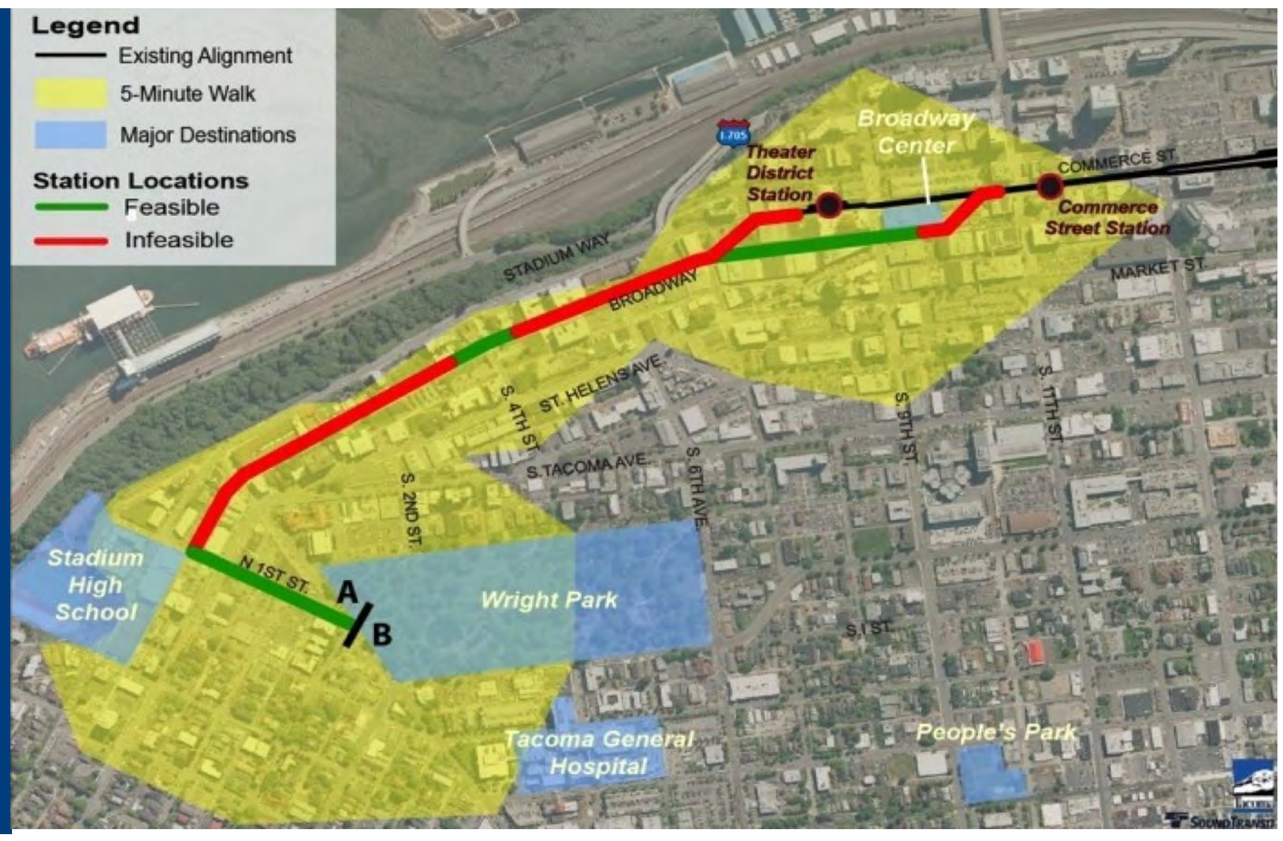
SEGMENT A: WALKING DISTANCE MAPS

TACOMA LINK EXPANSION

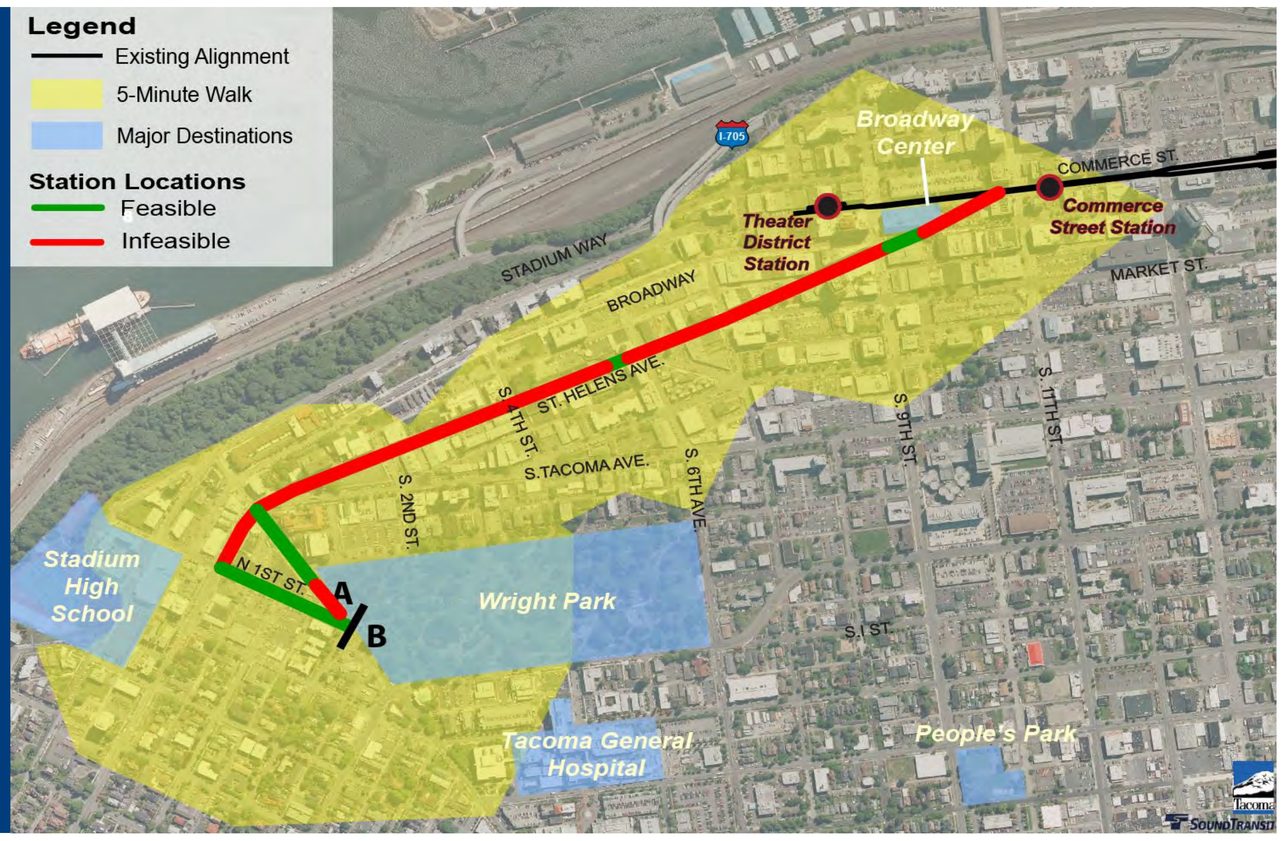
STADIUM WAY (A1)



BROADWAY (A2) & BROADWAY WITH THEATER SQUARE OPTION (A2A)



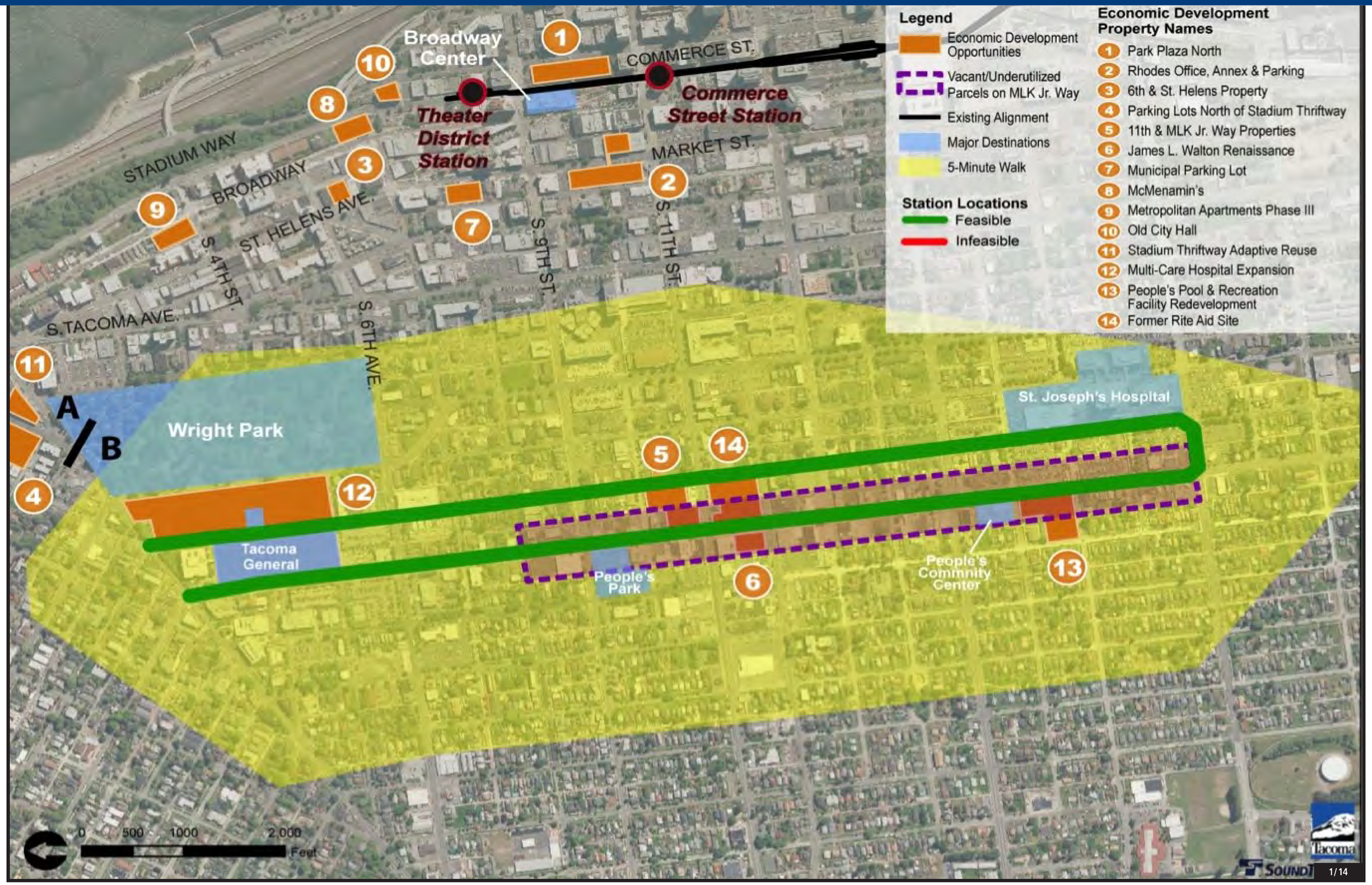
ST. HELENS (A3) & ST. HELENS WITH DIVISION ONLY (A3A)



SOUNDTRANSIT
RIDE THE WAVE

SEGMENT B: WALKING DISTANCE MAP

TACOMA LINK EXPANSION

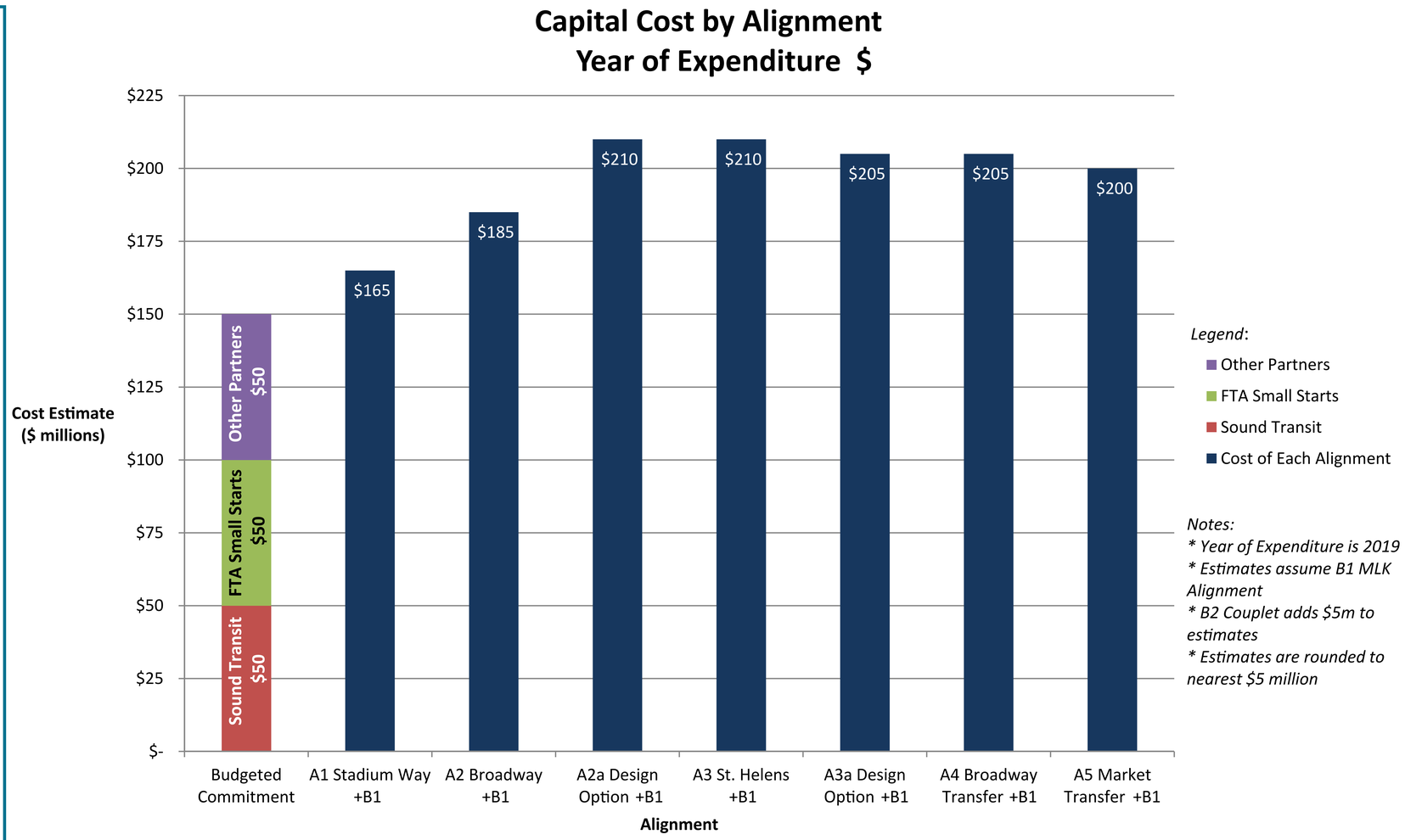


SOUNDTRANSIT
RIDE THE WAVE

CAPITAL COST COMPARISON

TACOMA LINK EXPANSION

- *Sound Transit will work with the City and the community to identify a project that is the right fit for Tacoma*
- *During the Alternatives Analysis phase, costs were high-level estimates used to compare corridors*
- *Current estimates are based on 5% engineering and specific street alignments*
- *Budget and revenue assumptions may need to be revisited*



SOUNDTRANSIT
RIDE THE WAVE

COST SAVINGS OPTIONS

TACOMA LINK EXPANSION

		A1-B1 Stadium-MLK	A2-B1 Broadway-MLK	A3-B1 St. Helens-MLK
	Terminus at 19th (Baseline assumption)	$165 million	$185 million	$210 million
Cost savings options	**Terminus at 11th**	$150 million	$170 million	$190 million
	Terminus at 6th	$135 million	$155 million	$175 million
	Single Track, MLK to 19th	$160 million	$180 million	$205 million
	20-min. headway	$150 million	$170 million	$190 million

Cost estimate considerations

- *Costs are rounded to nearest $5 million*
- *Costs based on year of expenditure (assuming mid-point of construction in 2019)*
- *B2 Couplet adds $5 million to estimates*
- *All cost savings options impact ridership 20-minute headways have the most impact on ridership*
- *Single-track design in selected areas would reduce the planned 10-minute headways to 12-15 minutes*

OVERALL EVALUATION RESULTS

TACOMA LINK EXPANSION

	Acquisitions & displacements	Community facilities	Approx. on-street parking removed	Traffic	Bicycle operations	Utilities	Construction	Land use plans	Economic development potential
Stadium Way **A1**	None	No direct impacts	15 spaces	Potential traffic conflict with I-705 offramp	Potential bike conflict (N 1st Street)	Fewer impacts	Typical in-street construction	Consistent with plans	30 acres of redevelopable parcels
Broadway **A2**	7 parcels (used as parking)	No direct impacts	15 spaces	New traffic signals at Commerce St. and Broadway	Potential bike conflict (Broadway and N 1st St)	Potential impacts	Retaining walls, impacts to streetscape	Consistent with plans	39 acres of redevelopable parcels
Broadway with Theater Square Option **A2a**	1 parcel (used as Pierce Transit Garage and Theater Square)	Potential interruption to Broadway Farmers Market operations. Direct impact to Theater Square.	15 spaces	New traffic signals at Commerce St. and Broadway	Potential bike conflict (Broadway and N 1st St)	Potential impacts	Retaining walls, reconstructed plaza	Consistent with plans	39 acres of redevelopable parcels
St. Helens **A3**	1 parcel (used as Pierce Transit Garage and Theater Square)	Potential interruption to Broadway Farmers Market operations. Direct impact to Theater Square.	65 spaces	New traffic signals at Commerce St. and Broadway	Potential bike conflict (Broadway and N 1st St)	Potential impacts	Widening of street between 7th St. and 9th St.	Consistent with plans	42 acres of redevelopable parcels
St. Helens with Division only **A3a**	1 parcel (used as Pierce Transit Garage and Theater Square)	Potential interruption to Broadway Farmers Market operations. Direct impact to Theater Square.	65 spaces	New traffic signals at Commerce St. and Broadway	Potential bike conflict (Broadway and N 1st St)	Potential impacts	Widening of street between 7th St. and 9th St.	Consistent with plans	42 acres of redevelopable parcels
MLK **B1**	None	No direct impacts	25 spaces	No new traffic signals	No conflict	Potential impacts	Typical in-street construction	Consistent with plans	88 acres of redevelopable parcels
MLK/J Couplet to 19th **B2**	None	No direct impacts	30 spaces	No new traffic signals	No conflict	Potential impacts	Typical in-street construction	Not consistent with draft Hilltop Subarea Plan	88 acres of redevelopable parcels
	Acquisitions & displacements	Community facilities	Approx. on-street parking removed	Traffic	Bicycle operations	Utilities	Construction	Land use plans	Economic development potential

SOUNDTRANSIT
RIDE THE WAVE

HELP SHAPE THE FUTURE OF TACOMA LINK

TACOMA LINK EXPANSION

Tell us what you think:

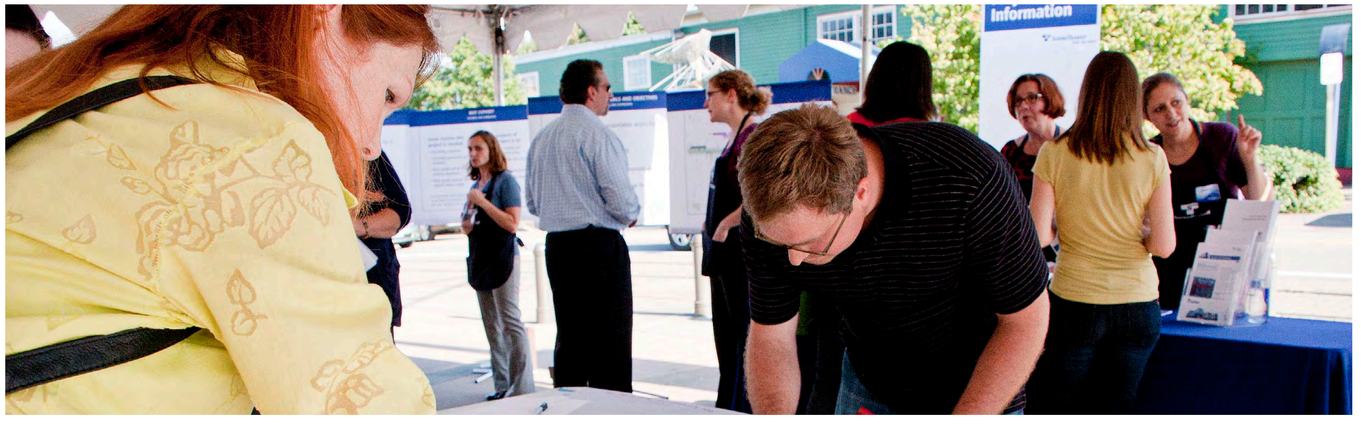
- What are your thoughts about the evaluation results?
- Which alignments, if any, should be eliminated from further consideration?
- Which alignment(s) do you think best meet the evaluation criteria?

How to comment

- Fill out a comment form and drop it in a comment box or mail it from home by Jan. 24
- Online: Complete an online survey at *soundtransit.org/tacomalinkexpansion*
- Email: *erin.hunter@soundtransit.org*

How to get involved

- Sign up for the latest project updates by visiting *soundtransit.org/subscribe*
- Visit the project website to learn about upcoming community meetings and events *soundtransit.org/tacomalinkexpansion*
- Invite us to provide a briefing for your organization by contacting Erin Hunter at *erin.hunter@soundtransit.org* or 206-370-5511



SOUNDTRANSIT
RIDE THE WAVE